The Middle Snake River Watershed Advisory Group

Meeting Minutes
601 Poleline Road, Twin Falls, Idaho
Wednesday, February 17, 2010
Time: 2:00 PM

Attendees:

Mike Trabert - City of Twin Falls Clyde Lay - Bureau of Reclamation Mike Beus - Bureau of Reclamation Chad Chorney- - DEQ-TFRO Brian Hoelscher - Idaho Power Terry Edwards - NRCS Bob Bolte - Gooding SCD Katie Shewmaker - DEQ-TFRO Terry Kramer – Twin Falls County Commissioner Jeff Williams - Rancher, Kimberly Kelly Yost – Interested Citizen Andy Morton – Clear Springs Foods Gary Fornshell - University of Idaho Extension Linda Lemmon – Idaho Aquaculture Association Sue Switzer - DEQ-TFRO Jordan Tollefson - ISCC Chuck Pentzer - ISCC Mike Etcheverry - DEQ-TFRO Terry Blau - IDWR

I. Welcome and Introductions

Mike Trabert- WAG Chairman

Mike Trabert called the meeting to order. Everyone introduced themselves.

II. Middle Snake River, Idaho: 20 Years Total Phosphorus, Macrophytes and Stream Flow Brian Hoelscher – Idaho Power

The Middle Snake River Watershed Management Plan, which is a composition of many TMDLs, was designed to restore water quality in the Upper Snake Rock Subbasin. The Total Phosphorus TMDL, which was approved in 1997, set a target for total phosphorus in the Snake River of 0.075 mg/L or 75 μ g/L. Using the RBM10 model with the 0.075 mg/L total phosphorus, EPA predicted that the aquatic macrophytes in the river would be reduced 20 to 30%. EPA also noted in their modeling that in the absence of more instream flow there would be a point of diminishing returns for water quality improvement resulting from sediment and nutrient reduction.

At King Hill, Idaho Power has been monitoring the Snake River every two weeks since the early 1990's for typical water quality constituents: total phosphorus, TSS, dissolved oxygen, temperature, ph, etc. During that same time period, they have been removing Aquatic Macrophytes at the Upper Salmon Peak projects using an automated track rake and hauling them off in truckloads.

It looks like there could be a downward trend over time through these data and for various reasons this downward trend could be explained. At the same time, we are seeing the truckloads of macrophytes from the Snake River seem to be increasing. This looks to be moderately, inversely correlated with Snake River flow— as flow in the river is low, you get more macrophyte growth.

If we are getting down to the 75 μ g/L target total phosphorus when macrophytes were supposed to be reducing 20 – 30%, they are actually getting worse. So do you further ratchet down this target or do you acknowledge, as EPA did, that in the absence of instream flow you get more diminishing returns.

The 100 year average flow in the river is 8000 cubic feet per second. At that flow it relates to about 500 truckloads of aquatic macrophytes. A review of the Snake River basin instream flow trend suggests that persistent documented decline in the Snake River plains aquifer. With this decline over a 10 year period you are going see a 16 to 25 % increase in macrophytes due to reduced flow in the Snake River basin.

You can't expect to gage success or failure of the TMDL based on one target, total phosphorus. There are a lot of other things going on in the system, flow being one, that we need to be cognizant of in future consideration or things people impose on us as further target reductions.

II. Snake River Water Quality Data - Preliminary Report

Sue Switzer - DEQ

This is the second version of the Preliminary Water Quality Analysis of the Mid Snake River. It was presented in the meeting in January. Revisions were made based on the comments we received; however, some of those comments were not able to be addressed adequately. Therefore, at the end of this version is a section listing some of the unanswered comments and questions and data Gaps

This Version 2 was submitted to the State Office February 11, 2010 as a PowerPoint. The 5-Year Review was also presented last Thursday. None of this document was integrated into the 5-Year Review. They are two separate documents.

The presentation includes historical background, water quality monitoring data, results of water quality loading, and implementation projects and trading potential.

Historical Background

In the historical background the Upper Snake Rock Subbasin is defined including political boundaries, ownership and land use. Other major points included in the historical background are a summary of the Snake River stream flow; a history of the TMDL approval; a summary of point source and non-point source inputs; and the influence of tributaries, canals and point sources on the Snake River Segments.

It was suggested that cfs be used in the stream flow summary instead of or along with acre-feet to be consistent. Throughout the document cfs is used for water flow. There needs to be clarification of what the percentages are in the Influence of Tributaries, Canals & Point Sources on the Snake River Segments.

Water Quality Monitoring Data

The quality control/quality assurance protocols for water quality data have been cited to address questions that came up on our QA/QC. The water quality data graphs have changed a little from the first version as comments were implemented. It was suggested the parameters be changed so that we are consistently looking at the same data for each site. From site to site they should be more comparable. Dates were put into the graphs, and peaks have been dated to help identify events that might have happened around that time. If there are results that are off the chart, in addition to the date you will see what the result number was.

The comment was made that you have plotted 103 flows over about 2500 days and connected your markers with continuous lines. So those peaks aren't peaks; they are whatever happened to be there on the day of your sampling. For flows, perhaps markers should be used instead of lines making it look like a continuous flow.

It was suggested that the red line representing the base flow be labeled as to what year and/or value.

On the Pillar Falls site graphs, the wrong legend on the flow data was put in. The peak on the E.coli results is listed in mg/L. It looks like the results got transposed from the TSS graph.

Results of Water Quality Loading

 The low Q scenario in the Mid-Snake River was presented by identifying the flow considerations that were used in the Middle Snake River Nutrient Management Plan, Mid-Snake TMDL, Upper Snake Rock TMDL, TMDL Executive Summary, and Upper snake Rock TMDL Modification. We are trying to give you a background on why we are using the flows we are using now going document by document. There was discussion, questions, and some confusion concerning the low Q scenario and the suggested future use of the 7Q10 flow.

- Monitoring/compliance point loads in the Mid-Snake River using load limits
 established in the TMDL for each of the specific monitoring site. We had lots of
 problems with the TP Load Exceedances in Version 1 because our sample
 numbers were way off the charts. It was a simple Excel problem where it was
 counting the 0 as a sample not just a place holder. The numbers should look
 better in version 2
- Segment loads as net loads in the Mid-Snake River net segment loads help to provide a view of how an upstream segment impacts a downstream segment.

Implementation Projects and Trading Potential

Implementation projects presented were the Upper Snake-Rock Conservation Effects Assessment Project (CEAP), Section 319 Water Quality projects, and non-point source projects. We really thought it was important to present these projects, and EPA was impressed at the amount of money that has been put into this watershed. There is a huge effect being made towards the improvement of the water quality.

Please write down your comments and send your written comments by email to Sue Switzer.

The Meeting was recorded, and the recording is included as part of the administrative record.